

## Claims

1. A method for handling digitally stored sound sequences (7D) such as MOH (= Music on Hold), voice sequences or signal

5 tones in a telecommunications system (2) having a CPU (2.3.1), a working memory (2.1) for the CPU (2.3.1) and a switching network (2.2), with a program code and/or data of telecommunications subscribers being preferably stored in the working memory (2.1), the telecommunications system (2)

10 establishes connections to terminals (3.1 - 3.n) via the switching network (2.2) and outputs sound sequences (7D) via the switching network (2.2) to at least one telecommunications terminal (3.1 - 3.n),

wherein

15 at least a part of the working memory (2.1) is used to store the digitally stored sound sequences (7D).

2. The method as claimed in the preceding claim 1,

wherein

20 the CPU (2.3.1) performs a data transfer (4) of the digitally stored sound sequences (7D) between working memory (2.1) and switching network (2.2).

3. The method as claimed in one of the preceding claims 1 and 2,

25 wherein

the data is transferred packet by packet and a TSA (2.3.3) is used between working memory (2.1) and switching network (2.2) in order to assign the digitally stored sound sequences (7D) to programmed timeslots.

4. The method as claimed in the preceding claim 3,

wherein

a FIFO shift register is used in the TSA (2.3.3) in order to support the packet-by-packet data transfer of the digitally stored sound sequences (7D).

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5. The method as claimed in one of the preceding claims 1 to 4,

wherein

in order to offload the CPU (2.3.1) at least one

10 microcontroller (2.3), in particular a DMA controller

(2.3.4), is used between working memory (2.1) and TSA

(2.3.3), which microcontroller is initialized by the CPU

(2.3.1) in order to perform the transfer of the digitally

stored sound sequences (7D).

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6. The method as claimed in the preceding claim 5,

wherein

the CPU (2.3.1) requests the microcontroller (2.3, 2.3.4) to

set the start address of the digitally stored sound

20 sequences (7D) in the working memory (2.1) and to set the

destination address in the FIFO shift register of the TSA

(2.3.3) in order to play back the digitally stored sound

sequences (7D).

25 7. The method as claimed in one of the preceding claims 5 and 6,

wherein

the CPU (2.3.1) requests the microcontroller (2.3, 2.3.4) to

set the start address of the digitally stored sound

sequences (7D) in the FIFO shift register of the TSA (2.3.3)

30 and to set the destination address in the working memory

(2.1) in order to record sound sequences.

8. The method as claimed in one of the preceding claims 1 to 7,  
wherein

5       the telecommunications system (2) digitizes sound sequences  
(7D) and stores them in the working memory (2.1).

9. The method as claimed in one of the preceding claims 1 to 8,  
wherein

10      at a certain filling level of the FIFO shift register, the  
TSA (2.3.3) requests the CPU (2.3.1) by means of an  
interrupt command (6) to start or to stop a new data  
transfer (4).

10. The method as claimed in the preceding claim 5 to 9,

15      wherein  
a CPU with integrated PECC (= Peripheral Exchange Control)  
transfer feature is used instead of the microcontroller  
(2.3, 2.3.4) for the transfer (4) of the digitally stored  
sound sequences (7D) between working memory (2.1) and TSA  
20      (2.3.3).

11. A telecommunications system (2) having a CPU (2.3.1), a  
working memory (2.1) for the CPU (2.3.1) and a switching  
network (2.2),

25      wherein  
means, preferably program means or program modules, are  
provided which perform the method as claimed in the  
aforementioned method claims 1 to 10.